

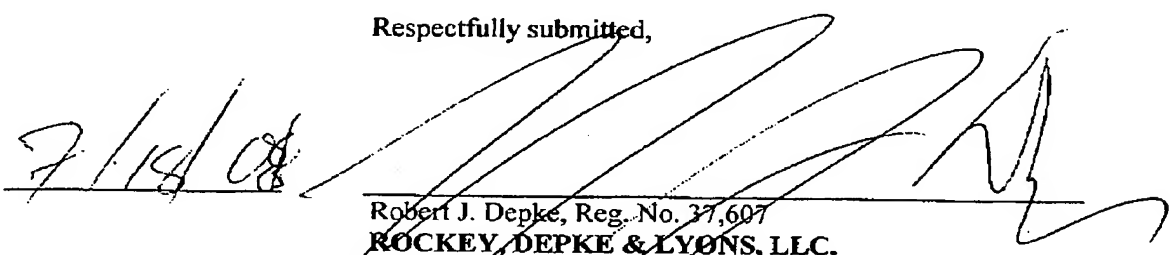
Appl. No. 10/826,038
Reply to Office Action of March 18, 2008
Amendment dated July 18, 2008

REMARKS

Applicants thank the Examiner for the indication of allowable subject matter. Applicants have replaced the Title of the Invention in accordance with the Examiner's request. Additionally, Applicants have modified Figures 19A and 19B to incorporate the "Prior Art" reference requested by the Examiner. Applicants have amended the application to conform with the Examiner's suggestions in order to place the application into condition for allowance. The Applicants have canceled all non-elected claims. The Applicants have made minor clerical modifications to the claim language. Accordingly, Applicants respectfully submit that all claims currently stand in condition for allowance.

Respectfully submitted,

Date: 7/18/08


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AMENDMENTS TO THE DRAWINGS

Applicants have amended Figs. 19A-19B to include the legend "PRIOR ART" as suggested by the Examiner. Applicants submit that no new matter has been added.

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(MARKED-UP VERSION)

ABSTRACT OF THE DISCLOSURE

A CMOS sensor has unit pixels each structured by a light receiving element and three transistors, to prevent against the phenomenon of saturation shading and the reduction of dynamic range. The transition time (fall time), in switching off the voltage on a drain line shared in all pixels, is given longer than the transition time in turning ~~ef~~ off any of the reset line and the transfer line. For this reason, the transistor constituting a DRN drive buffer is made proper in its W/L ratio.

Meanwhile, a control resistance or current source is inserted on a line to the GND, to make proper the operation current during driving. This reduces saturation shading amount. By making a reset transistor in a depression type, the leak current to a floating diffusion is suppressed to broaden the dynamic range.